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Iraq MH1

[For information on the topography, climate, agriculture and commercial crops, irrigation, stock raising, natural resources, production and supply, waterways, railways and roads of the valleys of the Tigris and Euphrates between the plateau of Asia Minor and the Persian Gulf discussed as one geographical unit rather than by political boundary, see M1 Middle East, Cat. 116, 21: Fisher, pp. 340-370.]

[For information on the topography, occupations and relative productivity of the desert plateau, and of the Arabian Peninsula as a whole, see M1 Middle East, cat. 116, 21: Fisher, pp. 427-449.]

1: Longrigg G-4,5 (ca.1915-1940) MH1 Iraq MH1

312 185 Although by 1900 these conditions were not unrealized either in Baghdad or Istanbul, they had not been formulated as connected problems for solution. Governmental activity in this sphere had consisted, at the caprice of Pashas, in no more than some measure of organization of petty local works. The Administration had in fact neither the knowledge nor control nor finance necessary to formulate or organize a comprehensive irrigation system. Heedless alike of present evils and of rich possibilities, the governors of 'Iraq were doing and planning nothing while irrigation in Egypt and India was making great and fruitful progress. Nor was the contribution of the public more promising; the shiftless tribal cultivators carried out with low efficiency such minimum of silt-clearance and flood-dyke repairs as was forced upon them, erected temporary canal-heads of reed-bundles or brushwood, multiplied their primeval devices of water-lift, wastefully prolonged or resited their canals, and ruined area after area with neglected salting.

An outstanding case of deterioration in irrigation conditions was occurring in these years on the middle Euphrates. Up to 1880 the Ḥilla branch had been maintained as the principal waterway, the Hindiya branch being a canal deriving from it. But the closing of the Ṣaqlawiya head up-stream, and the operation of natural forces of silting and scouring, allowed the Hindiya branch to gain in width and discharge. The problem of maintaining the flow of the Ḥilla branch had become first critically difficult and finally impossible. French engineers in 1891 completed a masonry dam which still held precariously in 1900, but failed to arrest the increasing ruin of Ḥilla branch irrigation.

487 The ancient land routes of the territory had remained constant since many centuries. Camel caravans used the desert ways of Damascus and Aleppo, mule-trains the time-worn hill tracks into Luristan, Kirmanshah, Persian Kurdistan, and the Van wilaya. 491 Within 'Iraq the routes were fixed by custom based on convenience; but here there were signs of recent progress in the provision of wayside Khans, new toll-bridges of stone or brick or resting on fragile pontoons. The roads, varying by districts in surface and security, were everywhere unsurfaced and neglected, deep in summer dust or flooded to seas of mud by rain or the overflow of canals.

499 Railways had, for many years, been hailed from a distance by 'Iraqis of every class as the bringers of ease and progress, and schemes in plenty had been propounded—those of Chesney in the eighteen-thirties, of Andrew in the 'fifties, and later of the Austrian von Pressel, the Italian Tonetti, the Frenchman Cottard, the Russian Kapnist. A local company had been formed in the 'eighties to construct a Khaniqin–Baghdad line, which lack of

1: Longrigg G-4, 5 (ca. 1915-1940) MH1 Iraq MH1

242 651 farmed it with improved techniques; and an 'Iraqi-Syrian group, that of the 'Asfar concession', signed with Government in 1924 an ambitious land-development and irrigation agreement, involving the construction of the Ḥabbaniya reservoir, a Faluja barrage, and a dam on the Diyalā. Limited cotton-planting without notable success was carried out in 1925 by an Asfar affiliate, Diyala Cotton Plantations; but the terms of the main concession were soon afterwards called in question by popular outcry, its semi-monopolist nature was revealed, and the whole enterprise was perforce reconsidered.

242 Meanwhile, a Government anti-locust organization, on the scale which this ruinous pest demanded and using every known method, came into being in northern 'Iraq while Government participated in interstatal plans jointly established in Damascus. The deplorable harvest of 1924, the result of excessive cold and rainlessness, was a reminder of the precariousness of agriculture. The small 664 231 Veterinary Department under Chadwick, besides its work with Army and Police horses and its civil animal hospitals, did what it could to control the endemic and epidemic diseases of the 'Iraqi flocks and herds, especially rinderpest which caused great annual losses.

653 494 Roads, mechanical installations, and buildings were the responsibility of the Public Works Department, of which the Directorship was passed by J. M. Wilson, in that office since 1920, to A. S. Clay in 1925. Roads were still at this period unsurfaced and deep in mud or dust, but constant care kept them somehow open. The mileage of road and track available for wheeled transport increased threefold, and hundreds of passenger and freight-carrying cars plied on every route. The care of these, with their accompanying repair shops, supplies, and dealers formed a new branch as much of industry as of travel. A trans-desert motor route, passing by 491 Ramadi and Ruṭba to Damascus and the Levant, was inaugurated in 1923 by two New Zealanders, the Nairn brothers, whose headquarters was at Damascus. It had immediate effect on 'Iraq's foreign orientation. The service in 1926 absorbed its first (Syrian) competitor, which, using a track by Hit and Palmyra, had been the victim in 1925 of a savage attack by Dulaym tribesmen. The Ruṭba–Damascus section of the Nairn route became unusable in the summer of 1925 by reason of the Druse rebellion, and for a year thereafter convoys were diverted to 'Amman and Haifa through 205 the forbidding lava country of Transjordan. The carriage of mails by the desert motor route became usual, until air-mail services superseded it. Postal arrangements within 'Iraq, now under 'Iraqi administration with British expert advice, grew more comprehensive and included all normal post office services. Telegraphs were

1: Longrigg G-4, 6 (ca. 1915-1940) MH1 Iraq MH1

The Lynch fleet had been diminished in 1938 by the loss of the *Mejidieh*, sold to Anglo-Iranian, and in 1941 by that of the *Malamir* and the *al-Kadri*, burnt out and scrapped respectively. Their rivals, notably Ḥannā al-Shaykh and 'Abd al-Karim Khudhayri (Khedery), were more than holding their own: but the competition of the railway and the roads must grow rather than diminish. To the road system, indeed, Paiforce contributed much, notably in the completed trans-desert highway to Jordan, in the re-surfacing of many road stretches, and in the maintenance in being of 'Iraqi transport fleets by the provision of tyres. Nevertheless, the upkeep of civil motor vehicles in war-time proved most difficult, and the numbers in use decreased. The air communications of the territory were not improved during the war; but before its end projects for a national air line were under formation. The European services crossing and visiting 'Iraq recommenced in 1945 after war-time curtailments, and the Egyptian Misr Airways restarted its Cairo–Baghdad service. A contract was given in 1945 to the Marconi Company for the erection of a new wireless transmitting station.

The course of foreign trade was notably deflected from its usual channels by the war. In 1939 the United Kingdom was its principal customer, followed by the United States, each of these countries taking approximately one-third of the total visible exports; but by 1944 the principal buyer was Palestine with Transjordan, followed by Persia. Visible exports, amounting to ID 4 million before the war, reached through enhanced prices ID 9 million before its end. The transit trade, reduced in 1939 to a value of some ID 3 million, reached ID 13 million five years later, thanks to the passage of goods to Russia. Imports rose from a value of ID 9 million before the war to ID 14 million in its last year; the United Kingdom's share in these fell from 33 to 11 per cent., that of Japan from 18 per cent. to nothing, while India's share rose from 8 to 30 per cent., Syria's from 2 to 16, the United States' from 8 to 12.

The desire for industrial expansion, always a cherished ambition, was stimulated by the war-time shortages and an increased local market; contrary factors were the shortage of raw materials, competition for skilled workers, and the impossibility of importing factory equipment. Of the seventy enterprises benefiting in 1944 from the law of 1929 most were on the humblest scale, with the importance only of pilot projects which could indicate to the middle class the possibility of a career outside Government service, the professions, or politics. Some war-time progress was made in brick manufacture; workshops produced hand-tools from scrap metal; the crushing of oil-seeds—cotton, sesame, and linseed—

1: Longrigg G-4, 5 (ca, 1915-1940) MH1 Iraq MH1

existed in Baṣra and Baghdad and their suburbs; and the telephone and telegraph had become familiar or indispensable to all classes save the most backward. The new wireless transmitting station completed in 1951 at Abu Ghurayb, with the most modern design and range, secured communication with Europe and America and was used for the national broadcasting. The Development Board planned an expenditure of ID 2 million on telecommunications between 1951 and 1956.

Progress in road improvement was delayed during 1946–50 by the financial narrowness of the post-war years. This and bridge-building formed an important part of the projects[1] intended for realization in 1951–6 through the Development Board. The completion of this programme would fundamentally transform the conditions of transport and travel in 'Iraq, with far-reaching economic consequences. The 'Nairn route' to Damascus was still in regular use; its traffic was highly organized, with air-conditioned vehicles, by the original company and its imitators. The Rawanduz road was little used; the tracks leading into Najd and Persia carried no important traffic; and the trunk route to Jordan or Palestine (p. 321) lost its value when the State of Israel blocked the sea-outlet it had offered.

5. TOWN AND COUNTRY, MID-CENTURY

The population of 'Iraq, declared by the census of 1947 to be 4,800,000, had by then doubled since the century opened. Its distribution[2] was in general unchanged as between towns, inlying villages, tribal country districts, and nomads; about a quarter were town-dwellers, a fifteenth nomads, the remainder settled cultivators. Wide areas of steppe desert and of barren mountain remained, as for the foreseeable future they must, almost uninhabited; the widest of such regions, those of the administratively separated northern and southern provinces of the Shamiya desert, amounted to some two-fifths of 'Iraq's whole surface. The average density of population for the whole territory was of the order of eleven persons to the square kilometre, or, omitting the desert provinces, eighteen. The liwā with the greatest population was that of Baghdad with 800,000 people; next came Diwaniya, Muntafiq, and 'Amara. The greatest density was of 49 persons to the square

[1] The projects considered as 'main roads', with their bridges, were estimated to cost: Baṣra–'Amara–Kut–Baghdad, ID 2,800,000: Baghdad–Kirkuk–Arbil, 2,500,000: Baghdad–Sharqat, 3,450,00. Elsewhere, ID 4,450,000 was allotted for 'mountain roads', 6,176,000 for miscellaneous bridges, 1,550,000 for a Hilla–Najf road, 1,300,000 for Hilla–Diwaniya–Shamiya, and 5,250,000 for numerous other routes.

[2] For distribution of the population by administrative units, see Appendix B.

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

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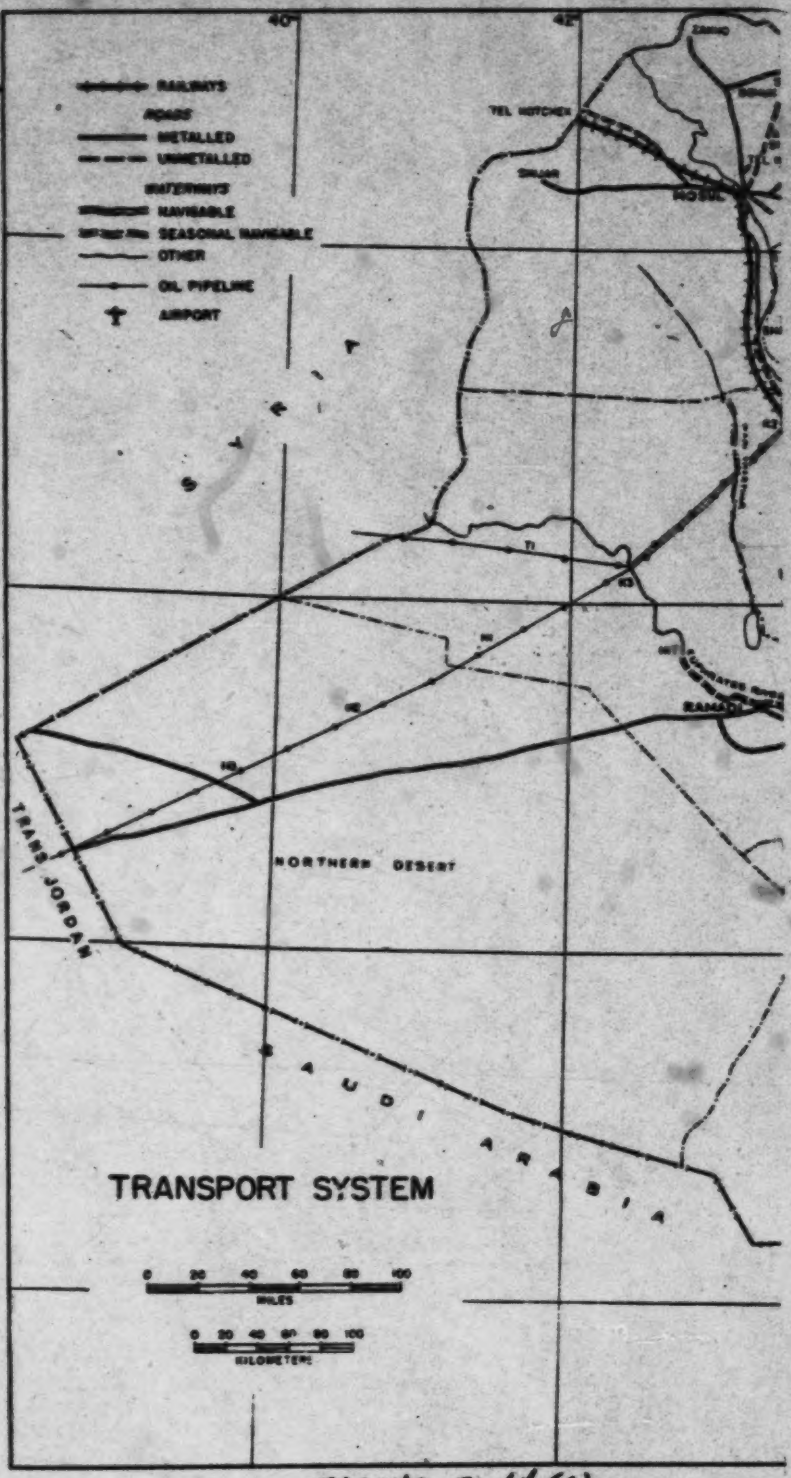

FACING P. 44(A)

7: International Bank N. S-4 (1951) 1952 MH1 Iraq MH1

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MAP III

FACING P. 44 (B)

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

and meteorological services. At the Baghdad airport it would be desirable to build an entirely new runway and to use a wing of the new railway building as the air terminal. The Port of Basra can finance the necessary work there, but that at Baghdad, costing probably between ID 250,000 and ID 300,000, will presumably have to be financed out of Development Board funds. The Mission has no specific recommendations to make on Iraqi Airways, which assures some internal and international services with a small fleet of four planes, except to suggest that its finances be completely divorced from those of the railways. It is neither logical nor sound financially to require the railways to defray the deficits of the airways. It would be desirable to carry out any future development of the airways in cooperation with other Middle Eastern countries.

Inland water navigation has steadily declined in importance and is now rather insignificant. While irrigation rather than navigation will always be the primary consideration in the use of available water resources, it is possible that the better regulation of the Tigris and Euphrates will ultimately result in some improvement in the navigability of these rivers. Limited but uninterrupted navigation might be insured if the river bed were trained by dams, locks and groynes into a narrow channel at low water and progressively wider channels at higher water levels. The feasibility and cost of such a scheme might ultimately be submitted for study to experts from the Netherlands where similar conditions have long been encountered.

Roads and Road Transport

Road transport has not assumed great importance in the past, primarily because most roads are unsurfaced and impassible for a large part of the year. Even large communities like Kut and Amara, although not situated on railway lines, are not served by all-weather roads. An interdepartmental committee worked out and presented in 1950 a 10-year program for the construction or improvement of 37 main surfaced roads involving a total length of 3,463 kilometers at an aggregate cost of ID 14,500,000. Both the program and the proposed specifications of the roads are sound. In addition, the building or improvement of about 8,000 kilometers of secondary or feeder roads, which do not need to be surfaced, will ultimately

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

491 be necessary. Such a program will need to be coordinated particu-
499 larly with the development of new agricultural areas. Earth excavated in the construction of new irrigation and drainage canals can be used in the building of such roads. The surfaced roads should be constructed by contractors of repute capable of furnishing their own road-making plant. It is generally recognized that the Baghdad-Kut-Amara-Basra and the Baghdad-Kirkuk-Erbil-Mosul roads should have first priority. The first of these is at present only a dirt road but the latter has sections which are already surfaced.

494 As road transport develops, it will be vital to institute some controls, particularly since most of the operators now provide only irregular and unreliable service. Limitations on loads and regular inspection of vehicles should be instituted and enforced. Operators of transport services should be licensed to make sure that they are equipped to provide adequate and reliable service at reasonable rates and that they carry insurance.

The Mission has also given some attention to the municipal bus service in Baghdad. Operations at present are seriously handicapped by the diversity and age of its transport equipment and high maintenance costs. A sound decision has been made to standardize equipment. The central workshop should also be modernized and re-equipped and a central garage and four auxiliary garages provided. To carry out this program financial assistance from the Development Board will be necessary. It is also suggested that more efficient management of municipal transport might be achieved through the appointment of a single Director General in place of the present Board, and that a stricter control over the collection of passenger fares be instituted to improve revenues.

Communications

206 For communications, capital outlays will be required primarily in connection with the extension of the telephone system. The needs are well-known in Iraq and do not require elaboration here. Although the communications services are operated at a profit which is credited to the government budget, it is suggested that future capital expenditures be financed by the Development Board. This will not only make it easier to balance the government budget, but will enable the Board to insist on better synchronization of the

7: International Bank N. S-4 (1951) 1952 MH1 Iraq MH1

Petroleum products are distributed by the Rafidain Oil Company, a subsidiary of the Anglo-Iranian Oil Company, and at prices, exclusive of taxes, which are among the lowest in the world.

TABLE 8

PRODUCTION OF PETROLEUM AND REFINED PRODUCTS
(in thousand metric tons)

	1947	1948	1949	1950	1951 (est'd.)
Crude oil					
Iraq Petroleum Company	4,354	3,017	3,671	5,986	7,500
Khanaqin Oil Company	339	367	365	384	350
Total	4,639	3,384	4,036	6,370	7,850
Refined products	n.a.	373	369	393	—

VI. Transport

The state-owned railway system is the principal means of transport, carrying about 2,000,000 tons of cargo and over 3,000,000 passengers annually. Part of it is standard and part meter gauge. The standard-gauge section is part of the original Berlin-Baghdad railway and runs from Baghdad northward via Mosul into Syria and Turkey. The meter-gauge line extends from the Port of Basra in the South to Baghdad and then beyond to Kirkuk and Erbil in the North, with a branch line to Khanaqin. Over recent years the railways have managed to carry out a considerable capital development program despite serious financial obstacles, but they now face the need of replacing, on a considerable scale, old track, rolling stock and locomotives.

Road transport has as yet primarily supplemented rather than replaced railway traffic. There are only about 11,000 passenger cars and a little over 9,000 trucks and buses in the country. Roads are generally inadequate. There are only about 2,500 kilometers of metalled and surfaced roads in all of Iraq. The remaining dirt roads quickly become impassable in bad weather. Some important

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

centers such as Amara and Kut are linked neither by rail nor by all-weather roads to Basra and Baghdad.

In Basra, Iraq possesses an excellent port capable of handling a considerable increase in traffic. Upcountry cargo into and out of the port is handled almost wholly by railway, for inland river traffic has declined greatly in importance owing to shallow water and other impediments to navigation.

The port and the railways are each run by an autonomous administration operating under a separate budget.

VII. Money and Banking

The banking system consists of the National Bank, five commercial banks, a number of private banks or *sarrafs*, the post office savings bank, and three state-owned longer-term financing institutions, the Industrial Bank, the Agricultural Bank and the Mortgage Bank.

The National Bank succeeded the Iraq Currency Board as the currency-issuing authority in 1949. Iraq is a member of the sterling area, so that its currency is backed principally by sterling assets in London. Although the law permits the currency to be backed up to 30 percent by Iraqi government securities, as of March 31, 1951, the total amount of currency in circulation was more than covered by sterling assets. Aside from its note-issuing function, the Bank is charged with the administration of foreign exchange control and the supervision of the banking system in accordance with a bank control law which became effective at the beginning of 1950. This law requires banks to keep the equivalent of 15 percent of their time and demand deposits as a reserve with the National Bank and to keep 50 percent of these deposits in the form of cash and investments in Iraq. The National Bank is empowered to reduce the reserve requirement to 10 percent and to vary the second between 30 and 70 percent. Since the commercial banks have had no need for recourse to the National Bank in order to replenish their cash resources, the Bank's loans and advances have remained very small. As of March 31, 1951, they

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

ANNEX E

TRANSPORT AND COMMUNICATIONS

489 Iraq's transport system, which is concentrated in the populated and cultivated eastern half of the country, converges on two points, Baghdad, the capital and trade center, and Basra, the country's only port.

504 The Port of Basra lies about 140 kilometers (85 miles) upstream from the Persian Gulf on the Shatt al Arab and is accessible to ocean-going ships of all sizes entering the Persian Gulf. Its site serves the economy of Iraq well, the junction of the cheaper ocean transport with the dearer inland transport being at the farthest practical point inland.

503 The Tigris and the Euphrates, together with their tributaries, offer natural transport routes. However, they have remained untrained and largely uncontrolled for centuries and, apart from a few short stretches on the rivers and their tributaries which are usable by local traffic, limited and restricted inland navigation is possible today only on the Tigris between Basra and Baghdad.

496 The railway system consists of three main lines, two of narrow gauge, one of standard gauge. One of the two meter-gauge lines is the main line from Baghdad to Basra, serving the most densely populated provinces besides connecting the two principal centers. The other links Baghdad with the northeastern provinces, east of the Tigris. The standard-gauge line runs from Baghdad on the right bank of the Tigris to Mosul, Iraq's second city, and beyond through a tip of Syria to Turkey, the Mediterranean and Europe. Until a year ago no physical junctions existed between the three main lines. Goods carried on both meter-gauge lines had to be ferried across the Tigris at Baghdad and then transshipped. The ferry has now been replaced by a bridge but the transshipment to and from the standard-gauge line remains necessary. Through passenger traffic between the three main lines is negligible.

491 A road system of approximately 8,000 kilometers (5,000 miles) covers the eastern half of the country, but most of the roads

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

491 are unsurfaced and impassable for long periods in wet weather. All-weather roads are at present found only in the Baghdad area and in the mountains in the North. The only passable trunk roads are those from Baghdad to Khanaqin, Baghdad to Kirkuk, Erbil and Mosul, and Baghdad to Rutba and Syria. Even these have shorter or longer sections in very poor condition. There is no all-season road between Baghdad and Basra.

508 509 Two civilian airports, Baghdad and Basra, serve the principal air routes between Europe, Asia and beyond. Internal air services are limited to one line between Baghdad and Basra. Military airfields and landing grounds and a few private air strips are available in certain places, but demand for internal air transport has so far been negligible.

509 475 One state air line, Iraqi Airways, operates services with neighbor countries and Egypt through Baghdad and Basra with a small fleet of four aircraft. Administration and management of the airline are combined with those of the state railways.

315 Oil from the oil fields at Kirkuk is carried by pipelines across the country to the Mediterranean ports of Tripoli and Haifa, but the line to Haifa is now out of operation. A shorter pipeline connects the southern Iraq oilfield with the Shatt al Arab oil port at Fao.

489 Transport connections with the outside world are well served by the Port of Basra for ocean-going traffic, by the airports of Baghdad and Basra in international air traffic and by the oil pipelines to the Mediterranean. At present only one railway line, beginning at Baghdad, connects Iraq with Syria, and via Syria with Turkey and Europe. A desert road exists for through road traffic between Iraq and Syria and Lebanon. A private company, Nairn Transport, operates an international bus service on this route. There are two main roads for exchange of traffic with Iran, one from Baghdad via Khanaqin, and one from Erbil via the Rowanduz Valley and Rayat. Future economic developments may perhaps demand new traffic outlets to the Mediterranean, shorter and better equipped than the existing railway and road routes, but at present there are few signs of such a demand.

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

V. Roads

Organization

Iraq's road system is controlled and maintained by the Public Works Department under the Minister of Communications and Public Works. It is headed by the Director General of Public Works and under his direction five divisional engineers assure the maintenance and works service in divisions centered in Baghdad (four provinces), Hilla (three provinces), Basra (three provinces), Kirkuk (two provinces) and Mosul (two provinces). A sixth divisional engineer is in charge of central operations in the capital. District engineers, usually stationed at the provincial capitals, are in charge of day-to-day maintenance. Planning is carried out at the headquarters of the Director General. There is a lack of technical staff to carry out surveys in the field. Except for this fact, the organization is efficient and effective. It may have to be expanded as the road construction program progresses. Provincial governments and municipalities control secondary and urban roads and streets.

At present the road system controlled and maintained by the Public Works Department consists of approximately

2,500 kilometers metalled and surfaced,
500 kilometers metalled only,
5,000 kilometers earth roads.

Many of the metalled roads were built in the two war periods, and most of them are concentrated in the immediate vicinity of the capital, between Baghdad and the East and North, and in the North. All the roads in the southern plains are earth roads, and their maintenance and use suffers from the effects of rains on the salt-impregnated soil. Roads within municipal boundaries are generally in a very poor state of repair, not excluding the streets in the capital. Roads in the Basra Port area are controlled and maintained by the Port Directorate and are in good repair.

Maintenance was, until a few years ago, extremely poor, but today every effort is being made, and with conspicuous success, at least to prevent further deterioration. Maintenance costs are allocated on the Ministry's budget and calculated at ID 40 per

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

491 kilometer treated. For the present this appears to be about sufficient, but costs will increase as the system expands and traffic develops. On the completion of a metalled system of 7,000 kilometers, as planned, the costs would rise to approximately ID 70 per kilometer per year, a total of ID 490,000.

Road Construction

499 A program was drawn up in 1950 by a Committee appointed by order of the Minister of Communications and Public Works on February 7, 1950. The Committee consisted of the Directors General of Public Works, State Railways, Irrigation, and Surveys, and the Chief Engineer, a British road expert from the London Ministry of Transport temporarily attached to the Public Works Department in Baghdad. This Committee is a laudable example of departmental coordination, and the plan drawn up by the Committee shows unmistakably the value of this cooperation.

The program schedules 37 roads, of a total length of 3,463 kilometers, to be built, or improved as the case may be, in a period of 10 years at a total cost estimated at ID 14,500,000. Construction costs are expected to vary from ID 3,500 to ID 7,500 per kilometer, including drainage, culverts, bridges and costs of supervision. The program assigns first priority to the main trunk road, Baghdad-Kut-Amara-Basra, now an earth road, and the trunk road, Baghdad-Kirkuk-Erbil-Mosul, some sections of which are already metalled.

The roads are to be built to accommodate two traffic lanes, together six meters (20 feet) wide with verges for pedestrians, pack animals and cattle. Specifications drawn up by the Public Works Engineers provide for three types of foundation—stone blocks, broken stone or gravel, eight to nine inches thick; and for two types of surfacing—bituminous macadam or graveled macadam, three inches thick.

The program is sound and the specifications are effective. The Mission recommends that both be adopted as the basis of the future road construction plan, but with the following qualifications:

1. Although trunk roads like the Baghdad-Basra and Baghdad-Kirkuk-Erbil-Mosul arteries and a few others should have a metalled width of six meters and wide verges on each side, the initial width of metalled surface on other

7: International Bank N. S-4 (1951) 1952 MH1 Iraq MH1

Transport licenses should be granted only if the proposed operator appears responsible and sufficiently well equipped to perform the transport services and if there is evidence of present or prospective need. Operators should be required to take out insurance, to adhere to published rates, routes and schedules, and to conform to loading regulations.

Maintenance

The maintenance of the new road system when once completed is even more important than its initial construction. Service and funds must be assured to keep the roads in the condition in which they have been built. The Minister of Finance should budget for annual expenditures, to be estimated by the Public Works Department, for maintenance of the road systems and all accessories including sign posting, for improvements necessitated by increased traffic, for inspection and control of road traffic and for the traffic police required. The expenditures should, in general, be covered by revenue from those who actually use the roads.

Subsidiary Roads and Urban Streets

It is recommended that at the earliest opportunity a system of cooperation between the Public Works Department and provincial and municipal road departments be established to bring maintenance, traffic control and municipal licensing in line with the government's policy in these matters and that appropriate provision for this cooperation be made in the budget.

City Transport

An essential part of the country's transport system is passenger transport service in the capital. Baghdad and its suburbs form a city of a population of over half a million spread over an area with a radius of four to eight miles. In 1938 it was decided to establish a municipal passenger service to be operated with buses. The war intervened and limited services were brought into operation in 1942 with converted army trucks equipped with locally built bodies. A loan of ID 500,000 was raised, more vehicles purchased and workshops and garages of sorts installed. The services deteriorated with the poor equipment, which was all that was available in wartime, and the municipality was unable to carry the financial burden. Early in 1950 the service was taken over by

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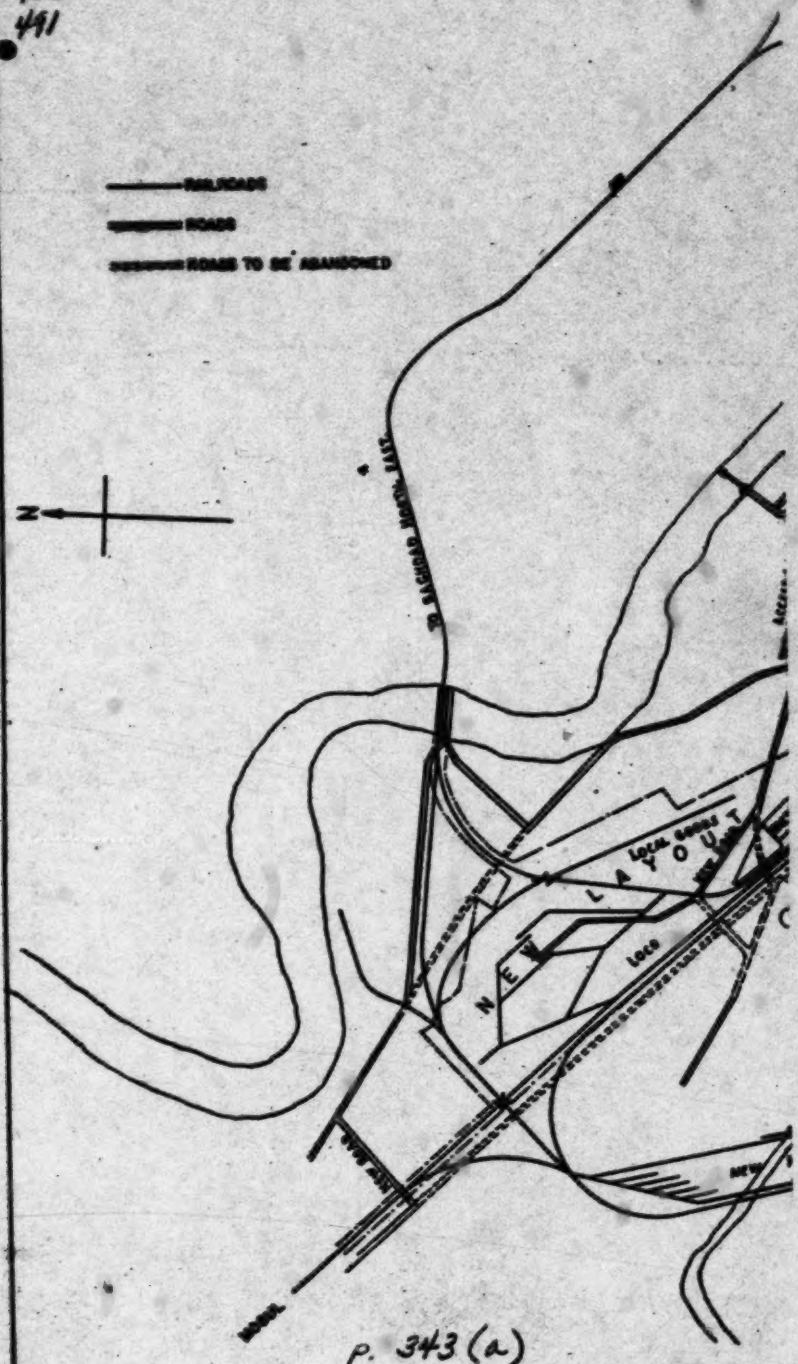

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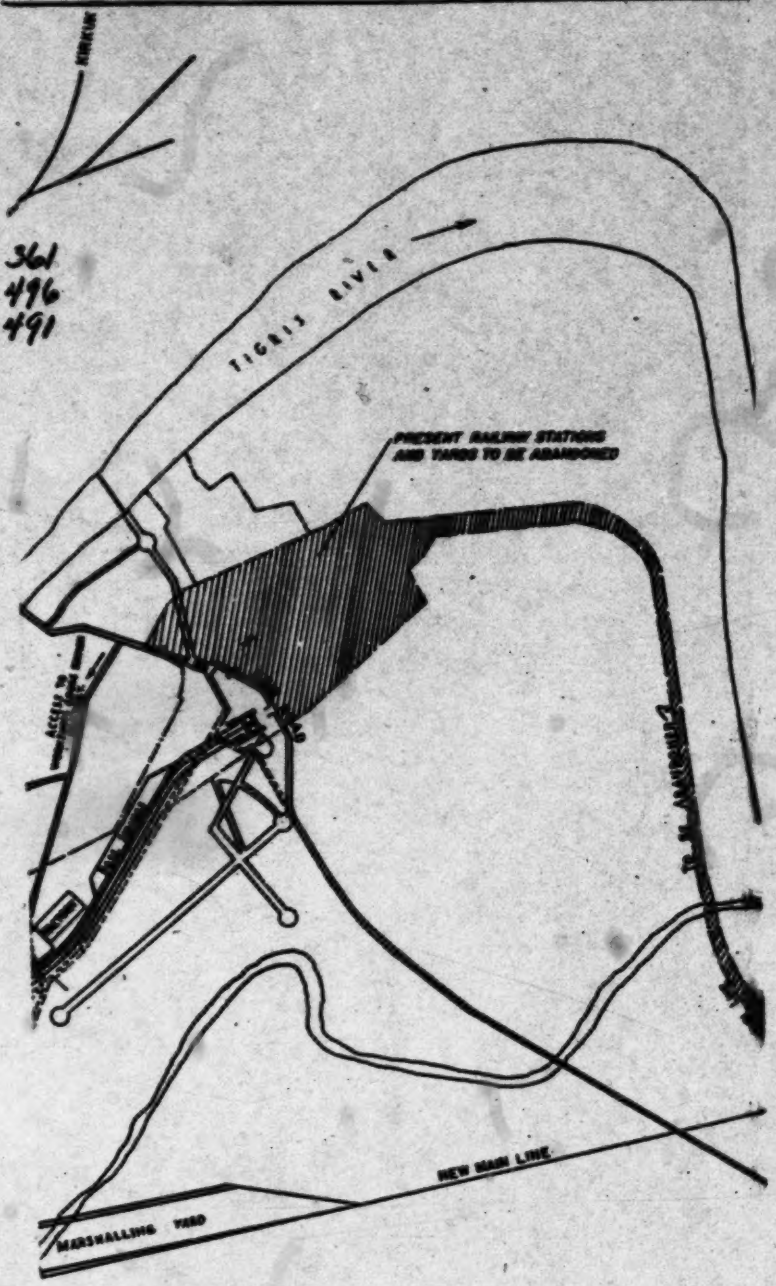

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p. 343 (b)

7: International Bank N. S-4 (1951) 1952 MH1 Iraq MH1

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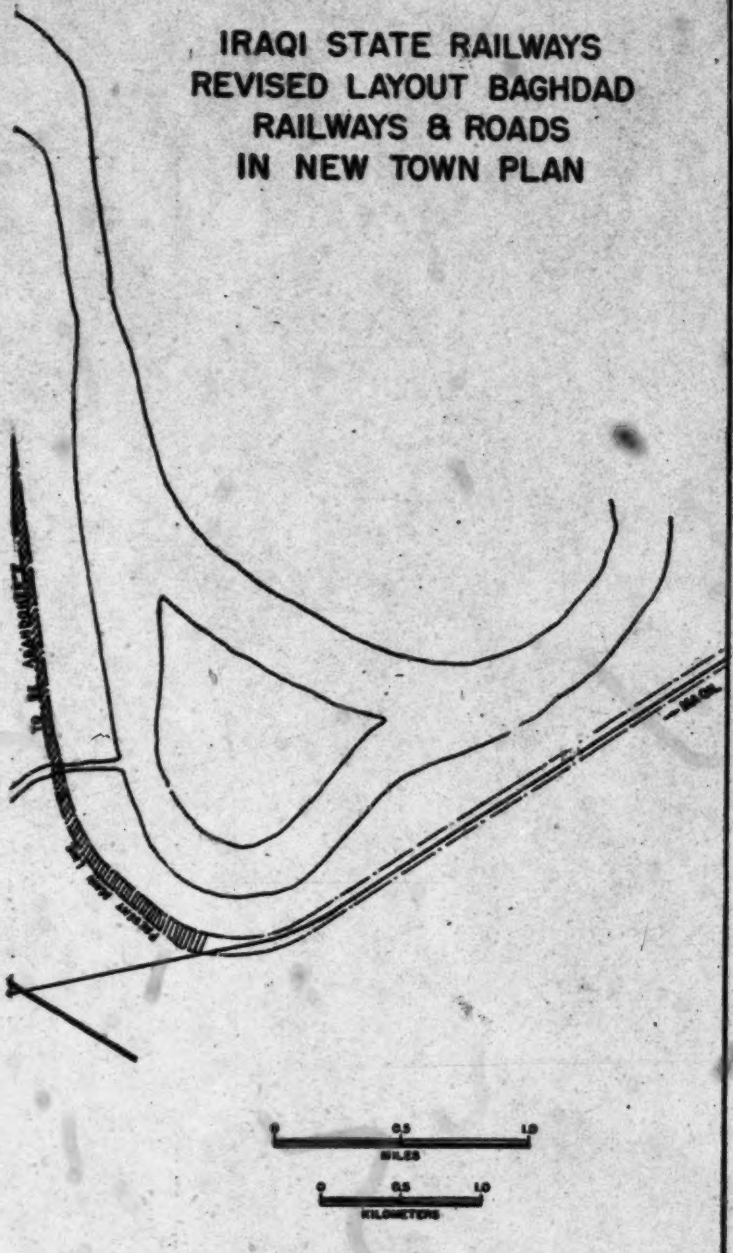
IRAQI STATE RAILWAYS
REVISED LAYOUT BAGHDAD
RAILWAYS & ROADS
IN NEW TOWN PLAN



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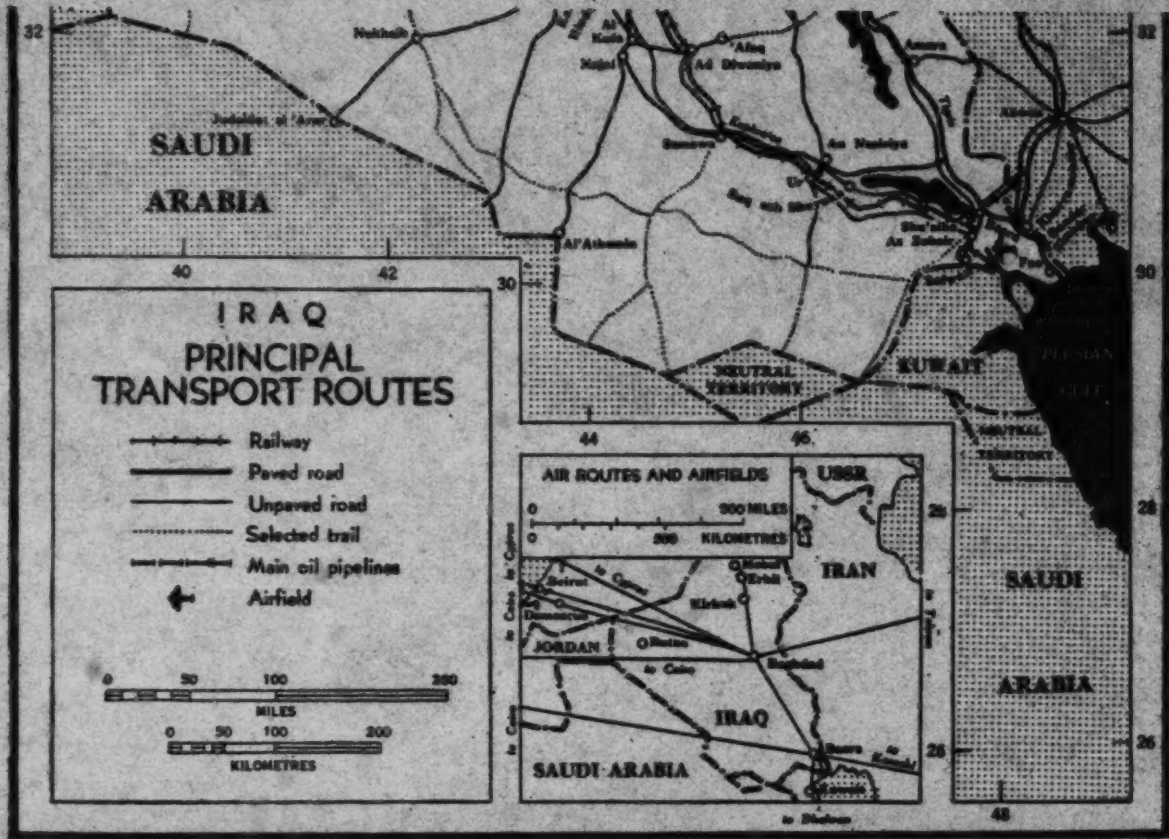

OCTOBER-DECEMBER 1950

496 By contrast, various railway sections built during the war (Baquba—Kut-al-Imara, Tanua—Hashimiya) were abandoned or dismantled after the war.

497 The railway traffic is shown by the following table, in which the years refer to fiscal years beginning on 1 April of the year stated:

	Passenger-kilometres	*Freight net ton-kilometres*
	(in millions)	
1928	89	147
1932	144	156
1937	251	302
1942	566	814
1947	631	606

There is a daily passenger and goods service (in both directions) on the Basra—Baghdad—Kirkuk—Khanaqin line; the traffic between the railway centres and the inland markets of Iraq and Iran is carried by road.

In 1946, the rolling-stock consisted of 114 engines, 324 passenger carriages and 6,642 goods vans.

Road Network

491 The actual construction of a road network in Iraq was begun after the First World War. At present (these figures relate to the end of 1948), the country has 7,320 kilometres of road; these roads are inspected and maintained by the government and are made up as follows:

/

	Kilometres
Macadamized (asphalt) roads	2,270
Improved roads (paved, but not macadamized)..	405
Unpaved roads	4,645
	7,320

In addition, there is a network of roads (approximately 3,500 kilometres) which have not yet been improved and are inspected by the local authorities.

The principal roads of Iraq which are regarded as passable for vehicles are as follows:

	Kilometres
(Region of date cultivation) macadamized road: Baghdad—Al Musaiyib—Hilla; unpaved: Hilla—Diwaniya—Samawa—Ur—Basra	622[5]
(Cereals, dates) unpaved road: Baghdad—Kut-al-Imara—Amara—Basra, with the Kut-al-Imara—Basra—Iranian frontier branch road....	718
(Petroleum region) macadamized road: Baghdad — Baquba — Khanaqin — Khosrovi (Iranian frontier)	176
(Petroleum) macadamized road: Baghdad—Kirkuk—Erbil—Mosul	485
(Cereals, cattle) Baghdad—Samara—Baiji—Qal'a Shargat—Mosul	433
(Cereals) road almost entirely macadamized: Baghdad—Al Falluja (leads to the seaplane base) — Habbaniye — Ramadi — Rutba — Mafrak (Jordan frontier), with the Al Falluja—Ramadi branch road round Lake Habbaniye	650

[5] Approximate figures.

	Kilometres
•491 (Petroleum) macadamized: Erbil—Ruwandiz—Raiat (Iranian frontier)	154
(Petroleum) macadamized: Kirkuk—Sulaimaniya (116 km)—Halabja—Iranian frontier	220
(Mosul)—Mineveh—El-Badi (Syrian frontier)	165
(Along the pipe-line) Kirkuk—Baiji—neighbourhood of Haditha—Rutba, with branch roads leading to Syria	682
(Cereals, cattle, petroleum) macadamized: Erbil—Kōi Sanjaq—neighbourhood of Kirkuk and neighbourhood of Sulaimaniya	242
Ramadi—Shithatha	132
Macadamized: (near Al Musaiyib)—Karbala; Karbala—Noukhaib (Saudi Arabian frontier)	352
Junction of the Karbala—Noukhaib—Bir el-Lussuf—Saudi Arabian frontier road	330
Hilla—Al Kufa—Najaf (across the Southern Desert)—Al Athamin (Saudi Arabian frontier), with the Najaf—Samawa branch road (on the Baghdad—Basra road)	396
Mosul—'Aqra	100
Baquba—Mandali—Khanaqin	180
Hashimiya	93
Al Kufa—Diwaniya—Afej	110
Basra—(ferry boat)—Tanua (Iranian frontier)	38
	6,278

The Baghdad—Rutba—Mafrak road, sections of the Baghdad—Al Musaiyib road, the Shahraban—Khanaqin—Khosrovi road, the Kirkuk—Sulaimaniya road, the Kirkuk—Erbil road and the Mosul—Erbil—Ruwandiz—Raiat road seem to be the best of all these roads, and most likely to be fit for fast motor transport throughout the year. The topography and climatic conditions of the country are such that, except during the rainy season (especially November and December), roads which are neither macadamized nor paved can be used extensively.

487 Land Communications with Foreign Countries

496 Iraq has direct connexions:

By *railway:* with Turkey, through Syria, the frontier station of Nusaybin, to Haidar Pasha (suburb of Istanbul, on the sea of Marmora, at the southern end of the Anatolian shore of the Bosporus); with Syria, where the Baghdad line intersects the Syrian line to Damascus near Aleppo; with Lebanon, through Syria, by the junction at Raiat with the Damascus—Beirut line, and at Homs with the Homs—Tell Kalakh—Tripoli—Beirut line; with the State of Israel, by the Damascus—Jordan line and the narrow-gauge Dera—Haifa branch line; with the Hashimite Kingdom of the Jordan, by the Damascus—Dera—Nassib—Amman—Maan line; with Egypt, by the Haifa—Rafah—Cairo railway; with Iran, from the terminus of the Trans-Iranian Railway at Khurramshahr, on the left bank of the Shatt al-Arab (24.4 kilometres from Basra), towards Ahwaz—Teheran—Bandar-Shah, on the Caspian Sea;

487 By *motor transport roads:* with Turkey, directly
• 491 through Zakho, and through Syria, by the Mosul—Tel Kochek—Nusaybin—Diyarbekir roads; with Syria (and beyond) by the Mosul—Tel Kochek, Mosul—El Badi—Mineveh, Kirkuk—Haditha—Jalib-Akashe, Baghdad—Rutba—Tell Droite—Palmyra, and Baghdad—Rutba—Damascus roads; with Jordan: by the Baghdad—Ramadi—Rutba—Mafrak roads; with Saudi Arabia: by the Baghdad—Karbala—Nukhaib—Judaidal al Arar, and El Jauf

487 (Nefud Desert) roads; with Kuwait: Basra—Az
491 Zubair—Safwan, to Jahra; with Iran: Basra—(ferry-boat)—Tanwa—to Ahwaz, Baghdad—Khosrovi—Kermanshah—Hamadan—Kazvin—Teheran, Kirkuk—Sulaimaniya—Penjwin—Bashmak (frontier) towards Sinneh, Mosul—Erbil—Ruwandiz—Raiat.

Civil Aviation

508 Iraq has two airports for long distance international service, one at Baghdad and one at Basra. Each of these airports also has a seaplane base, the first on Lake Habbaniye, about 100 kilometres from the city of Baghdad; and the second, at Ma'agil, 7 kilometres from the town of Basra, near the land airport. The two airports are provided with modern technical equipment and with all the facilities for the comfort of the passengers, such as hotels, restaurants, etc. The country has several other aerodromes and landing fields, the most important of which are at Rutba and at Mosul. In 1948 and 1949, thorough-going repairs had to be made to the runways of the Baghdad airport, during which time it was only accessible to aircraft not exceeding eighteen tons. Nearly all the Baghdad traffic was
509 diverted to the Basra airport. In 1948, Basra airport was used by the Iraqi Airways Company and by seven international aviation companies, including

needs of the southern districts are particularly acute: as yet they possess only roads which are not practicable for any traffic, still less for heavy motor traffic, during the rainy season and for a long time afterwards, and boat-bridges of a very old—almost antediluvian—type across the Euphrates and other rivers.

The government is taking steps to modernize the Baghdad and Basra-Ma'agil airports (the latter, in addition to its modern technical installations, has had since 1937 an air-conditioned hotel, swimming pool, tennis courts, etc.). The aim is to make them into first-class international airports. In addition, a training school for civilian air pilots was established in Iraq in 1937.

As the country lacks hydroelectric power stations, in spite of the existence of various large dams, there is now a plan to utilize the Bekhme dam for the generation of electric power.

In the expectation of the return of normal political conditions in the Near and Middle East, the

[8] It is interesting to note that for the Basra—Baghdad section (568 km), these coaches are placed on special 1-metre bogies.

3:Royal Institute of International Affairs U-4 (no date)1954 M1 Middle East
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basis of the Iraqi State Railways, which were made over to the civil authorities set up by the British Government in 1920, and in 1923 to the newly-formed Government of Iraq. They became the property of the Iraq Government on 1 April 1946. They consist at present of two gauges. A metre-gauge line runs from the Port of Basra to Baghdad, and thence across the River Tigris by the new bridge to Kirkuk and Arbil. This line has branches from Shuaiba Junction to Shuaiba, Zubair, and Jebel Sanam Quarry, from Ur Junction to Nasiriya and from Jalula Junction to Khanaqin. A standard-gauge line connects Baghdad to Tel Kochek on the Syrian frontier. A through rail service with air-conditioned coaches on the section Basra to Baghdad connects with the Taurus express from Baghdad via Mosul to Istanbul and thence to continental Europe and Great Britain. The through standard-gauge connexion from Baghdad to Tel Kochek was opened for traffic on 15 July 1940. An extension of the metre-gauge main line from Kirkuk to Arbil was opened to traffic on 6 June 1949. There is a total of 1,050 miles open, of which 328 miles are standard (4 ft 8½ in.) gauge and 722 miles metre gauge. 496

For the year ending 31 March 1951 the total receipts were ID3,870,174, total expenditure ID3,816,974, number of passengers carried 3,809,412, goods 1,890,413 tons. 497

Roads. At the end of 1948 Iraq contained some 1,400 miles of surfaced metalled roads, 250 miles of unsurfaced metalled roads, and 5,000 miles of earth roads. Most of the metalled roads are in the immediate vicinity of Baghdad, between Baghdad and the east and north, and in the north. Elsewhere their lack is due mainly to the absence of suitable road material and the expense of bringing it to the site. The earth roads which take their place, especially in the southern plains, are levelled and where necessary embanked and bridged but are vulnerable to the rains. Their defects are to some extent offset by the flatness of the construction and repair. 491

The main transport routes are: Baghdad to Mosul via Samarra; Baghdad to Mosul via Kirkuk and Irbil; Kirkuk to Sulaimania and Halabja; Irbil to Rowanduz from north-west Persia; Mosul to Amadiya; Mosul to Zakho; Mosul to Tel Kochek for north-east Syria and Turkey; Baghdad to Khanaqin for Persia; Baghdad to Basra via Kut and Amara; Baghdad to Basra via Hilla and Samawa; Baghdad to Kerbela; Baghdad to Rutba for Syria and Jordan.

In 1950 a governmental committee drew up a ten-year programme which provided for the construction or improvement of some 2,150 miles of road. First priority was accorded to

3:Royal Institute of International Affairs U-4 (no date)1954 M1 Middle East
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491 the main roads Baghdad–Kut–Amara–Basra and Baghdad–Kirkuk–Irbil–Mosul, which are at present unmetalled or only partially metalled. The Development Board has allocated nearly ID27 million to these projects.

493 494 Road traffic is light. At the beginning of 1953 the number of registered motor vehicles was given as follows, most of them operating in or around the larger towns: private cars 8,000; taxis 3,500; buses 2,900; lorries 6,500; motor cycles 1,900. In Baghdad an efficient bus service is operated by a State Passenger Transport Board. A private cross-desert bus service links Baghdad with Damascus, and there are private bus services between Iraq and Persia.

504 505 *Basra Port*,[1] lying some eighty miles up the Shatt al-Arab from the Persian Gulf, is the only commercial port of Iraq; an oil port is being constructed at Fao, near the mouth of the Shatt. A small port established during the Second World War at Umm Qasr, on a sea inlet south of the Shatt al-Arab entrance, has since been dismantled. The authority of the Port, which is controlled by a special department of the Iraq Government, extends from the outer bar of the Shatt to a point seventeen miles above the town of Basra. The Shatt is sufficiently deep to admit large ocean-going vessels, but the Fao bar at its mouth requires constant dredging to clear an entrance for the larger of them. During the Second World War extensions were carried out in view of the increased volume of traffic; in consequence there are now 4,500 feet of continuous jetty, providing berthing for eight large vessels at a time and two or three smaller ones, in addition to barge and lighterage berths. Basra Port handles a large proportion of the country's trade. During 1952 some 400 ocean-going vessels, with a net registered tonnage of 1,132,000, and some 260 tankers and water-carriers, with a net registered tonnage of 927,000, were handled by the Port Authority in Basra, Fao, Abadan, and Khorramshahr. During the financial year 1951–2 cargo imported at Basra totalled 511,600 tons and cargo exported 800,000 tons. The closure of Abadan has occasioned the Port a severe loss of revenue, estimated at ID100,000 a month; port and dredging facilities have nevertheless been maintained.

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502 *Inland Waterways*. The Tigris between Basra and Baghdad is navigable for vessels of up to four feet draught from February to August except for short flood periods in April and May in some years; during the remaining five months navigation is impeded for long periods. Inland water transport has lost much of its former importance. The last remaining regular navigation

[1] See *Port of Basrah*, official publication of the Port Authority.

63:Simmons et al G-5 (1941-1951) 1954
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of the 33rd parallel. Affiliated companies have concessions over the remaining territory—the Mosul Petroleum Company in the region west of the Tigris and the Basra Petroleum Company south of the 33rd parallel. Oil is extracted from the Kirkuk fields by the Iraq Petroleum Company and conveyed by pipelines to Mediterranean ports. It was formerly pumped to terminals in Tripoli and Haifa, but the latter pipeline has been closed since the Arab-Israeli hostilities in 1948. A new pipeline, constructed from Kirkuk to the Syrian port of Banias, was opened early in 1952.

In 1938, the Basra Petroleum Company began drilling operations in the Persian Gulf area, where the existence of an extensive oil field has since been established. In 1950, a pipeline was completed to its shipping terminal at Fao, at the head of the Gulf. The activities of the Mosul company are still in the exploratory stage, but the production of oil has recently been started at Ain Zala. It is piped to the Mediterranean by a line which joins that from the Kirkuk fields at Baiji, on the Tigris.

A smaller oil field at Naft Khanah, near the Iranian border, is worked by the Khanaquin Oil Company, a subsidiary of the Anglo-Iranian Oil Company. This company operates a refinery on the Alwand River, near Khanaquin, which supplies petroleum products for local consumption. Since 1952, it has also constructed a small refinery at Basra to process products for use in southern Iraq. It obtains the crude oil from Naft Khanah or from the Basra Petroleum Company.

Iraq derives a considerable revenue from the pilgrimage traffic. The principal shrines of the Shia sect are located at An Najef, Kerbela, Kadhimain and Samarra, and, in addition to local pilgrims, they are visited annually by thousands of Shiites from Iran, Pakistan and other Moslem countries. The privilege of burial near the shrines is also coveted by devout Shiite Moslems.

Transportation is mainly by roads or waterways. Motor highways link the princi-

62 Simmons et al G-5 (1941-1951) 1954
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pal population centers and radiate from Baghdad and Mosul to cities in Syria, Iran and Turkey. The Tigris is navigable to barges from Basra to Baghdad throughout the year, and to smaller craft as far as Mosul during the high-water season. The Shatt al Arab is open to ocean-going vessels, and Basra, about 85 miles from the Persian Gulf, is one of the major ports of the Middle East. A government-operated railroad, part of the famous "Berlin to Baghdad" railway, runs from Basra to Baghdad and Mosul, with connections through Aleppo to Istanbul. A branch line extends from Baghdad to Kirkuk, Erbil and Khanaquin. A government-owned airline serves Iraq and the neighboring countries, while international lines from Europe to Africa and the Far East stop at Baghdad and Basra.

Food and Nutrition

The nutrition of the people is governed by the cultural habits of the different racial and social communities, the economic status of the individual families and the food supplies available under diverse climatic conditions. Undernutrition is prevalent among the poorer inhabitants—tenant cultivators, urban laborers and nomadic tribes—who make up over three quarters of the population. Wheat, barley, rice and dates are the staple food crops of the country, while vegetables and fruits, other than dates, are frequently scarce. Wheat is widely grown, primarily in the rainfall areas of the north, but also in the irrigated riverain zones of the south. Barley is cultivated extensively, and, like wheat, is used in the preparation of breads and of *burghul*, a coarse-grained cereal product typical of this region. Millet and maize are common crops in the south. Rice is produced in certain lowland districts in the Kurdish highlands and on the fringes of the southern marshes, and is a popular food among all sections of the population. Peas, beans and lentils are usually consumed throughout the year, and tomatoes, eggplant and different root and green vege-

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